SAKS HAM COMMUNICATION SYSTEMS NEW DELHI-58

OUR PRODUCTS

SMPS Battery Charger ONE Outputs With Digital Meter DUAL Selection

SIZE 130mm x 130 mm Wt. 2.5Kg.



SPECIFICATIONS

AC INPUT 110 V to 265V

EMI RFI Input Filter As Per International Standards SMPS Basic DC Input to 1 Output Charger Basic DC Input 12 V/5A

Current Limit Limiting Resistance factory adjusted

AC Ripple <50mv as per ISI standard

Charger Output 14V/ 5 A +- 2%

Digital Meter V/A Dual Switch Optional
DISPLAY LED
Optional Setting on Demand

Battery Voltage / Current can be seen
CHARGED at 14V (New Batteries)
CHARGED at 13.5V (Old Batteries)

Optional Setting on Demand CHARGED at 13.5V (Old Batteries)
Reverse Battery Protection on Output

Application Suitable for 50 -100 Ahr. Batteries

Warranty 12 Months from the date of purchase at Works OPERATION:-

When Charger is put on without Battery, Charged indication shows the O.K status of SMPS outputs. When fresh battery is connected, the charged indication will be switched off, indicating the battery is connected & is charging LED will glow. When the battery is fully charged upto 14V ,or 13.5 (old Batteries) charged indication will appear showing battery is fully charged.

SMPS Battery Charger TWO Outputs CC / CV



Specifications

SIZE 200mm x 220mm

Wt. 4 Kg.

Input AC 110 to 265V

EMI RFI FILTER in built as per International Standards SMPS DC INPUT before the CC CV Module 12 V 5A

CC CV DC 2 Output Charger

Current Limit Adjustable from 0 to 2 A on panel

Short ckt. Protected yes

AC Ripple <50mv as per ISI standard

Charger Output 16V/ 2 A +- 2%

Digital Meter V/A Dual Switch Optional Battery Voltage / Current can be seen

Reverse Battery Protection On both Outputs

Application Suitable upto 26 Ahr. Batteries

Warranty 12 Months from the date of purchase at Works

Operation:-

Current Limit Setting

- 1. Rotate the Voltage Knob in Anti clockwise & adjust the voltage with 1 V Output
- 2. Short ckt. the Output Terminals with 1.5mm Wire
- 3. Adjust the Current Knobs to desired current Limit
- 4. Remove the shorting after adjustment of current limit.
- 5. Adjust the Voltage with Voltage knob for the desired Charging Voltage
- 6. For 6 Volt/12V Battery adjust 7.5V / 14.2 –15V
- 7. For Equalizations of Battery, adjust 16V, this will desulphate the Battery Desulphasation will improve the batter for soft sulphated batteries.
- 8. This equalization voltage will remove the soft sulphation of battery.

SMPS Battery Charger FOUR Outputs



SIZE 130mm x 130 mm Wt. 2.5Kg.

Specifications

Input AC 165V to 265V EMI RFI FILTER in built as per International Standards SMPS DC INPUT 12 V 10A

12V 2.5A 4 Output Charger

Current Limit 2.5 A with Limiting Resistance

Short ckt. Protected ye

AC Ripple <50mv as per ISI standard

Charger Output 14.2V/ 2.5 A +- 2%

Reverse Battery Protection On 4 Outputs

Application Suitable for 20 Ahr. Batteries

Warranty 12 Months from the date of purchase at Works

SMPS Eight OUTPUTS



SIZE 130mm x 220 mm Wt. 3 Kg.

Specifications

Input AC 165V to 265V EMI RFI FILTER in built as per International Standards SMPS DC INPUT 12 V 10A

12V 2.5A 8 Output Charger

Current Limit 1 A with Limiting Resistance

Short ckt. Protected

AC Ripple <50mv as per ISI standard

Charger Output 14.2V / 1 A +- 2% Reverse Battery Protection On 8 Outputs

Application Suitable for 7 Ahr. Batteries

Warranty 12 Months from the date of purchase at Works

Battery Life Tester

SMPS CHARGER/DISCHARGE with TIMER

SIZE 200mm x 220mm

Wt. 5 Kg.



PICTURE of Discharger / Charger working is explained as under:-

- 1. Connect the 7 Ahr Battery on the Battery Terminals shown in the Picture
- 2. Adjust the Low Battery cut off on the V-Meter with the POT for the desired voltage
- 3. Adjust the Discharge Current from 0.1A to 30A with the Potentiometer For 7Ahr battery, adjust 7Amper in the digital Amp. Meter. This discharge current is constant +-1% irrespective of the battery voltage being discharged at constant inbuilt ELECTRONIC load.
- 4. Start the Discharger with the start switch,

- 5. The Timer will start counting the Discharge time of battery till the battery reaches the low set value of battery & the discharger will automatically stop Discharging
- 6. Timer will also stop the counting at the LOW battery Voltage where the discharger has stopped.
- 7. The Discharge time should be 30 mts at 7 A discharge current.
- 8. Inbuilt Charger will charge the Battery from the same terminal by switching the charger switch.
- 9. The discharge process can be repeated if required.

Weight

SCR CHARGER 15Kg.



Application

Charger for 10 Batteries in Series Current adjustable from 1A to 10A

Can be used for 1 Battery to 10 Batteries with 20 Amp. Dimmer as per the AC input Chart provided No Isolation.

For Primary 220 V Isolation use 15A Transformer optional.

SCR Charger Transformer Details

1. AC Primary Input Current 15A Max.

Constant Current Variable Range 1 Amp. To 10.5 A Coarse / Fine Control.

FOR 1 to 10 Battery Output, following Transformer Tapings is required.

Constant Voltage Variable with Coarse / Fine Control

1.	SCR AC Input	35V / 15A	12 V / 10 A battery	Charging DC Output Adj. 10V to 18 V
2.	SCR AC Input	50V / 15A	24 V/ 10 A battery	Charging DC Output Adj. 21V to 35 V
3.	SCR AC Input	65V / 15A	36 V/ 10 A battery	Charging DC Output Adj. 32V to 52V
4.	SCR AC Input	90V / 15 A	48 V/ 10 A battery	Charging DC Output Adj. 42V to 70V
5.	SCR AC Input	110V / 15A	60 V/ 10 A battery	Charging DC Output Adj. 54V to 88V
6.	SCR AC Input	125 V / 15A	72 V/ 10 A battery	Charging DC Output Adj. 64V to 108V
7.	SCR AC Input	145 V / 15A	84 V/ 10 A battery	Charging DC Output Adj. 75V to 122V
8.	SCR AC Input	165 V / 15A	96 V/ 10 A battery	Charging DC Output Adj. 86V to 142V
9.	SCR AC Input	180 V / 15A	108 V/ 10 A battery	Charging DC Output Adj. 96V to 158 V
10.	SCR AC Input	200 V / 15A	120 V/ 10 A battery	Charging DC Output Adj. 104V to 174 V

<u>Display Digital Meters</u> <u>Digital Dual Volt/Amp. AC meter for Checking AC input</u>
<u>Two DC meters separate DC volt / Amp. Meter for Battery Voltage / Amp. Monitoring is provided.</u>

SMPS DC SUPPLIES

Available from 12 Volt to 110 V DC in various Current Rating DC DC Converters
For Solar Application , For Railway application 110 V

Application

ELECTRONIC LOADS



Pre-adjustable Constant Current Loads up to 30A for checking DC Power Supplies Discharging Batteries.

For Testing the DC Power Supplies , it is essential for all UPS / Inverter Manufactures Without Bulky Resistive Dimmers

Digital Panel Meters Volt / Amp / Temp.

Sizes Available 96mmx48mm Or 96mmx96mm





DC Voltage Range 1999

Amp. 100A with Shunt

SMPS CC CV Supply / CHARGER



Operation:-

Current Limit Setting

- 1. Rotate the Voltage Knob in Anti clockwise & adjust the voltage with 1 V Output
- 2. Short ckt. the Output Terminals with 2.5mm thick Wire
- 3. Adjust the Current Knobs to desired current Limit
- 4. Remove the shorting after adjustment of current limit.
- 5. Adjust the Voltage with Voltage knob for the desired DC Voltage operation

LED HOUSE LIGHTS



 $\begin{tabular}{ll} For Commercial QUOTE & e-mail to & $\inf o@scsembedded.com$\\ Alternate e-mail & sakshamcsvep@yahoo.com \end{tabular}$

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MOVING MESSAGE DISPLAY

OPERATIONAL MANUAL OF THE LED MOVING DISPLAY

Instructions for OEM/Dealers before selling:

This document describes the operation of "High Tech MOVING MESSAGE DISPLAY". When you unpack the unit from the box, the equipment requires configuration, Digit Display size, Speed of the right to left movement, Date, Day, Mode 12/24 Hrs. Time which have to programmed by simple Computer Key Board PS-2. Programming doesn't need any Computer.

The following image shows a 12 digit Indoor display board attached with the normal pc keyboard before configuration.





Please follow the steps to configure your display board system and entering the message you require to display.

Note: At any moment within the following steps beyond the STEP2, if you don't want to follow the steps then press ESC key and scroll to the EXIT menu and press Enter key to exit from the setup. But the first tow steps are essential.

STEP1: Initially when you plug in the power supply to your display board, it will show you the first menu item of your system setup i.e. DEGIT which refers to your character length of your display board.

Figure 1-1: Digit Menu



At this point press Enter key to set your display board character length. When you press the Enter key the default setting will be prompted as the following figure shows

Figure 1-2: Default Display Digit size



Now use your keyboard Backspace key to erase the default digit value and enter the number of characters your display board have. In this case since the display board is 12 digit, we will edit the default 08 to 12 as shown in figure 1-3.

Figure 1-3: User Entered Display Digit size



Note: For entering the Digit number with the keyboard please use the alpha numeric key pads instead of the numeric key pad at the right most side of the key board.

Now press Enter key to fix your display board size.

STEP 2: After fixing the display digit size the next menu item i.e. SPEED will be prompted. It is to regulate your right to left movement of the message. Figure 2-1 shows the SPEED menu.

Figure 2-1: Speed menu



Press the Enter key to fix the desired speed of the movement. The default speed would be 1 which is the lowest. The speed can be increased from 1-3 range. Figure 2-2 depicts the default speed as 1.

Figure 2-2: Default Speed



At this stage if you want to change the speed then press down arrow key of the keyboard to increase the speed number. At your desire speed number press Enter key to fix the speed for the left to right movement of the message.

Note: You don't need to press any alpha numeric key to set the speed. Rather press the down arrow key until you prompted your desired speed.

Now press Enter key to fix the speed of the right to left movement of your message.

STEP 3: Third steps describes the EDIT menu item which is should be only affect the system when there is some user message in the memory. So at the initialize step we may not deed to enter into this menu item and can skip for the next menu item. Figure 3-1 shows the edit menu.

Figure 3-1: Edit Menu.



To skip this menu, simple press down arrow key of your key board. Soon after the next menu item LED TEST will be prompted.

STEP 4: If you want to test the health of your display board, whether all LEDs are ok the LED TEST menu will probably help you out. Being at this point if you press the Enter key then all the LDEs in your display board should glow if they are perfect. Other wise you can point out the faulty one easily in spot. Figure 4-1 and Figure 4-2 show the led test method.

Figure 4-1: LED TEST menu.



Figure 4-2: Display Board LED test.



You can skip this step, but still we recommend going through the test process before delivering the product.

- STEP 5: If at some point you find the display board setting and messages has been disturbed badly then to revive the system enter into the CLEAR menu which erase all your setup data with the user message and will bring you exactly to the STEP1. Then follow the steps to get a new configuration. The CLEAR menu, should be used very carefully as it deletes all the setup data like DIGIT, SPEED etc.
- STEP 6: In this step you will learn how to set or edit the Day, Date and time of the Real Time Clock. Figure 6-1 shows the DATE/ TIME menu for the said purpose. This menu contains 3 more sub menus as: SET DATE, SET TIME, SET MODE.

Figure 6-1: Date / Time setup menu



Press the enter key to step into to the setting of date and time of your display system. This will prompt the SET DATE sub menu as shown in Figure 6-1-1. Other sub menus can be accessed by pressing the down arrow key from here.

6.1 SET DATE

Figure 6-1-1: Set Date menu



Press enter to set Day/Date. The format of the date display is "DAY DD/MM/YY" e.g. TUE 29/01/08. Pressing the enter key the current system date will be displayed and the first character of the Day will start blinking. Remember that the Day part of the date will be changed by pressing the down arrow key while blinking. And the rest of the date can be changed by any valid alpha numeric keys. Figure 6-1-2 display the date in edit mode.

Figure 6-1-2: Set Day, Date



When you finish the editing the date then press Enter key to set the date, which will flash the message as bellow.

Figure 6-1-3: Date saved conformation message



Soon after this step you will be taken out of the sub menu. If you want to set time as well then again come to the STAGE 6 with the help of down arrow key. Figure 6-2-1 shows the SET TIME menu.

6.2 SET TIME

Figure 6-2-1: Set Time menu



Press enter to set Time. The format of the date display depends upon the current mode (24Hrs/12Hrs) of the time display. For both the mode the display format has been kept same e.g. hh:mm:ss. Pressing the enter key the current system time will be displayed and the first character of the Time (hh) will start blinking. Set the clock accordingly pressing the valid numeric keys and press enter after finishing.

If the current time display mode is in 12Hrs mode then further an AM/PM conformation will be asked to the user which can be selected by pressing the down arrow key. Figure 6-2-2 show the AM/PM prmpt.

Figure 6-2-2: AM/PM mode select prompt



Unlike the date saved the time set also conform the user that the time has been successfully. If you want to set time mode then again come to the STAGE 6 with the help of down arrow key. Figure 6-2-3 shows the SET MODE menu.

Figure 6-3-1 SET TIME MODE (24Hrs/12Hrs)



Time display mode can the in one the two modes i.e. 12Hrs or AM/PM mode and 24Hrs mode. The time set also follows this setting while editing the time. Pressing enter the user will be prompted the opposite mode of the current setting. For example if the current mode set to 24Hrs mode then pressing Enter key the user will be prompted as "12H MODE" and visvarsa. If you don't want the change the mode then Press Esc to come out of the setting. Figure 6-3-2 show the time mode selection prompt.

Figure 6-3-2 Time Mode selection prompt



STEP 7: Now you have finished all the necessary to start with your display board. You will find the EXIT menu item at last to exit from the set menu. Press Enter key to exit at the following displayed prompt.

Figure 7-1 Exit Menu



When you exit from the menu by pressing the Enter key on EXIT prompt, immediately the organization and the contact of the manufacturer will be displayed then you will be prompted to enter the messages.

You can now turn of the switch and switch on again to check whether all your setting parameters have been fixed. This time rather you will be prompted as "ENTER MSG" which indicate that the set up is ready and there is no user message found to display. Figure 7-1 shows the message entering prompt.

Figure 7-1: Enter message prompt.



You have finished all from your side. Please refer the user manual for further details.